

Trinity River Restoration Program Draft Strategic Plan: 2003-2008

The intent of this package is to give reviewers an initial indication of format and content of the TRRP Strategic Plan, with early focus on the draft mission statement and program goals and objectives. This is a work in progress, and additional opportunities will be provided for your participation. Content is largely illustrative, and is not intended to be complete or comprehensive at this time.

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1.0 Program Justification and Mission

1.2 Mission Statement (what we do):

“The mission of the Trinity River Restoration Program is to restore, enhance, and conserve anadromous fisheries, native plant communities, and associated wildlife resources of the Trinity River basin in sufficient quantity and quality to ensure long-term sustainability.”

1.3 Program Goals (our primary focus)

The following goals describe the primary focus of the Trinity River Restoration Program. There is no explicit priority associated with the order they are presented. None of these goals can be implemented alone; together they represent an integrated approach for restoration.

- Restore populations of anadromous fish in the Trinity River basin to levels that existed prior to the construction of Trinity and Lewiston dams, and maintain such levels.
- Restore attributes of a healthy, functional alluvial river system to the Trinity River downstream of Lewiston Dam to enhance native fish and wildlife resources.
- Provide credible and objective scientific knowledge that furthers our understanding of regulated alluvial river systems for effective adaptive management of the Trinity River.

6.0 Implementation of Program Goals

A detailed discussion of science-based and river-specific objectives organized around the program goals and linked to the Record of Decision:

Variable annual flow regime
Mechanical channel rehabilitation
Sediment management
Watershed restoration
Infrastructure improvement

Objectives and Outcomes (measurable progress):

Current conditions (what do we have to work with, what are the information gaps):

Tasks (operational details, link to annual program of work):

Strategies (techniques to help achieve priorities):

Hypotheses (scientific questions to be tested):

6.1 - Restore populations of anadromous fish in the Trinity River basin to levels that existed prior to the construction of Trinity and Lewiston dams, and maintain such levels.

6.1.1 – Improve habitat conditions in all reaches of the Trinity River and for all life cycles of anadromous fish species.

- Consider late summer/early fall temperature and flow requirements when developing annual flow recommendations.

6.2 - Restore attributes of a healthy, functional alluvial river system to the Trinity River downstream of Lewiston Dam to enhance native fish and wildlife resources.

6.2.1 – Design annual flow recommendations to achieve restoration and physical condition objectives outlined in the Trinity River Flow Evaluation Study.

- Determine total water volume based on water-year type.
- Recognize and take into account interim constraints imposed by court rulings.
- Coordinate with Central Valley Operations and others.
- Identify opportunities not initially recognized in the ROD for consideration by the Trinity Management Council.
- Maximize flow-related benefits for rehabilitation sites and sediment management, including frequency considerations.
- Optimize potential biological response for species under consideration when developing and implementing annual flow recommendations.
- Use species-specific biological production and population models, e.g., degree-day model for riparian seed release.
- Establish real-time instrumentation to track environmental conditions.

6.2.2 – Complete necessary infrastructure modifications for wet (8,500 cfs) and extremely wet (11,000 cfs) water-year flows as soon as possible.

- Plan, design, and implement modifications for bridges incapable of passing 8,500 cfs flows (e.g., Salt Flat and Biggers Road) by April 2004.
- Plan, design, and implement modifications for structures susceptible to 8,500 cfs flows (e.g., “little yellow house,” Poker Bar roads, and other impacted structures) by April 2004.
- Plan, design, and implement modifications for bridges incapable of passing 11,000 cfs flows (e.g., Poker Bar and Bucktail) by April 2005.
- Plan, design, and implement modifications for houses, roads, and other structures susceptible to 11,000 cfs flows by April 2005.

6.2.3 – Increase geomorphic and hydraulic complexity to provide greater diversity of fish habitats capable of supporting a wide range of life history stages.

- Plan, design, and implement all feasible mechanical channel restoration projects below Canyon Creek until final resolution of flow schedules is achieved.
- Construct projects that encourage channel meanders.
- Increase areas of shallow, low velocity fry and juvenile salmonid rearing habitat.
- Pursue side channel projects anywhere within the upper 40 miles that are sustainable under current and foreseeable flow conditions.

6.2.4 – Minimize fine sediment supply and storage in the mainstem Trinity River.

- Monitor sediment collection ponds for efficiency, storage capacity.
- Maintain capacity of collection ponds through periodic dredging.

6.2.5 – Balance the coarse sediment budget in the mainstem Trinity River.

- Monitor sediment transport and delta conditions by substrate sampling, pool size.
- Develop, refine, and apply a predictive sediment transport model for use in development of annual flow recommendations and implementation of long-term gravel injections.
- Develop a comprehensive gravel management plan that addresses short and long-term gravel supplementation, delta maintenance, cost, and logistics.

6.2.6 – Modify distribution of riparian vegetation to benefit fish and wildlife species.

- Remove riparian vegetation from channel margins.
- Restore riparian vegetation in floodplain areas.

6.3 - Provide credible and objective scientific knowledge that furthers our understanding of regulated alluvial river systems for effective adaptive management of the Trinity River.

6.3.1 – Test scientific hypotheses and reduce management uncertainties by implementing flow schedules, channel restoration activities, sediment management, and watershed restoration within the context of predetermined study designs.

- Fully develop and use a “blocking strategy” in the implementation of restoration projects and related monitoring activities.
- Incorporate decision support models in design of restoration projects.
- Develop a scientifically supportable design, construction, monitoring, and evaluation framework for projects below Canyon Creek that recognizes current time constraints.